

### MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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## DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

### **NOTICE OF ACCEPTANCE (NOA)**

Firestone Building Products Company, LLC 250 West 96<sup>th</sup> Street Indianapolis, IN 46260

### **SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

### **DESCRIPTION:** Firestone EPDM Single Ply Roof Systems over Recover Decks.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 13-0423.06 and consists of pages 1 through 35.

The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY
APPROVED

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### **ROOFING SYSTEM APPROVAL**

<u>Category:</u> Roofing

Sub-Category: Modified Bitumen

Material: EPDM Deck Type: Recover

Maximum Design Pressure: See Specific Assemblies

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

<u>Product</u>	<b>Dimensions</b>	Test <u>Specifications</u>	Product <u>Description</u>
Standard RubberGard®	45 & 60 mil	ASTM D4637 Type I	Non-Reinforced EPDM membrane.
RubberGard MAX®	45, 60 & 75 mil	ASTM D4637 Type II	Polyester scrim reinforced EPDM membrane.
RubberGard MAX FR®	45, 60 & 75 mil	ASTM D4637 Type II	Fire Retardant Polyester scrim reinforced EPDM membrane.
RubberGard MAX PT®	45 & 60 mil	ASTM D4637 Type II	Polyester scrim reinforced EPDM membrane with integrated 3" preapplied seam tape.
RubberGard Platinum®	90 mil	ASTM D4637 Type I	Non-Reinforced EPDM membrane.
RubberGard LS-FR®	45 & 60 mil	ASTM D4637 Type I	Fire Retardant Non-Reinforced EPDM membrane.
RubberGard LS-FR PT®	60 mil	ASTM D4637 Type I	Fire Retardant Non-Reinforced EPDM membrane with integrated 3" pre-applied seam tape.
RuberGard EcoWhite®	60 & 90 mil	ASTM D4637 Type I	Non-Reinforced, bi-laminate, white on black EPDM membrane.
RubberGard EcoWhite® PT	60 mil	ASTM D4637 Type I	Non-Reinforced, bi-laminate, white on black EPDM membrane with QuickSeam Tape.
EPDM FormFlash	various	ASTM D4811	Self-curing EPDM flashing
Reinforced Perimeter Fastening Strip	.045" x 6" x 100'	ASTM D4637	Non-dusted EPDM reinforced strip for non-penetrating base tie-in details
BA-2004 T	5 gallon pail	Proprietary	Neoprene based bonding adhesive
SA-1065 Splice Adhesive	1 gallon and 5 gallon pails	Proprietary	Synthetic polymer based adhesive
Single-Ply LVOC Bonding Adhesive	5 gal. pail	Proprietary	Solvent based bonding adhesive.
Single-Ply LVOC Bonding Adhesive 1168	5 gal. pail	Proprietary	Solvent based bonding adhesive.
Single-Ply QuickPrime Primer	3 gal. pail	Proprietary	Solvent based primer used to clean EPDM



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		Test	Product
<b>Product</b>	<b>Dimensions</b>	<b>Specifications</b>	<b>Description</b>
EcoWhite® QuickSeam Splice Tape	3" x 100' 6" x 100'	Proprietary	Tape for field splicing
AcryliTop	5 gallon pail	Proprietary	Acrylic coating
Water Based Bonding Adhesive P	5 gal. pail	Proprietary	Water based bonding adhesive.
QuickPrime, QuickPrime Plus, QuickPrime Plus LVOC, Single-Ply LVOC Primer	5 gallon pail	Proprietary	Primer used to clean and prime EPDM
QuickSeam Flashing	.080" x various widths x 100'	Proprietary	Semi-cured EPDM flashing laminated to cure seam tape
QuickSeam Batten Cover	.095" x various widths x 100'	Proprietary	Cured EPDM and a seam adhesive laminate
QuickSeam Joint Cover	.070" x 5.75" diameter	Proprietary	FormFlash with two layers of butyl/EPDM adhesive tape laminate
QuickSeam Tape	3" x 100'	Proprietary	Tape for field splicing
QuickSeam R.M.A. Strip	10" x 100'	Proprietary	Strip of RubberGard MAX with QuickSeam Tape for anchoring membrane to substrate
Splice Wash SW-100	5 gallon pail	Proprietary	Cleaning and prep solution for EPDM
Pourable Sealer S-10	.78 gallon, Part A .10 gallon, Part B	Proprietary	Two part polyurethane sealant

### **APPROVED INSULATIONS:**

#### TABLE 2 **Product Name Product Description** Manufacturer (With Current NOA) Firestone Building Products ISO 95+ GL and tapered **Isocyanurate Insulation** Company, LLC ISOGARD HD Polyisocyanurate with a coated Firestone Building Products fiberglass facer Company, LLC ISOGARD HD Composite Polyisocyanurate with a coated Firestone Building Products fiberglass facer composite Company, LLC insulation. RESISTA and tapered Polyisocyanurate foam core Firestone Building Products laminated to a coated fiberglass Company, LLC facer FiberTop E Regular wood fiber insulation Firestone Building Products Company, LLC Georgia Pacific Gypsum LLC DensDeck, DensDeck Prime Silicon treated gypsum SECUROCK Gypsum-Fiber Rigid, gypsum-based board stock USG Corp. Roof Board SECUROCK Glass-Mat Rigid, gypsum-based board stock USG Corp. Roof Board



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### **APPROVED FASTENERS:**

### TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Firestone All-Purpose Fastener	Insulation and membrane fastener	Various	Firestone Building Products Company, LLC
2.	Firestone Heavy-Duty Fastener	Insulation and membrane fastener	Various	Firestone Building Products Company, LLC
3.	Firestone Concrete Drive	Insulation and membrane fastener for concrete decks.	Various	Firestone Building Products Company, LLC
4.	2" Metal Plate	Membrane seam attachment plate.	2" dia	Firestone Building Products Company, LLC
5.	Firestone Polymer Fastener	Insulation and membrane fastener for gypsum decks.	Various	Firestone Building Products Company, LLC
6.	3" Polymer Fastener Insulation Plate	Galvalume AZ55 stress plate	3" square	Firestone Building Products Company, LLC
7.	Insulation Fastening Plate	Galvalume insulation plate	3" diameter	Firestone Building Products Company, LLC
8.	Firestone V-Plate	Membrane seam attachment plate.	21/4" dia	Firestone Building Products Company, LLC
9.	Firestone HD HailGard Fastener	Fastener for use with OSB and Firestone HailGard products	Various	Firestone Building Products Company, LLC
10.	Metal Batten Bar	Galvalume AZ55 batten strip	10' long, 1" wide	Firestone Building Products Company, LLC
11.	Coiled Metal Batten Bar	Galvalume AZ55 batten strip	220' long, 1" wide	Firestone Building Products Company, LLC
12.	Polymer Batten Strips	Polymer, corrosion –free, batten strip	250' long, <sup>3</sup> / <sub>4</sub> or 1" wide	Firestone Building Products Company, LLC



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### **EVIDENCE SUBMITTED:**

<b>Test Agency</b>	<b>Test Identifier</b>	<b>Description</b>	<u>Date</u>
Underwriters Laboratories, Inc.	R9516	UL790	07/17/13
Factory Mutual Research Corp.	1V1A7.AM	FM 4470	06/25/92
1	1W3A4.AM	FM 4470	12/01/92
	1T7A3.AM	FM 4470	01/18/92
	1V6A9.AM	FM 4470	02/27/92
	2W6A2.AM	FM 4470	06/25/93
	2X9A8.AM	FM 4470	06/14/94
	3010822	FM 4470	07/31/02
	3019991	FM 4470	09/20/05
	3011282	FM 4470	08/08/02
	3034561	FM 4470	12/08/08
	3038770	FM 4470	08/04/11
	3036586	FM 4470	02/22/10
	3036256	FM 4470	04/27/09
	3038442	FM 4470	11/18/10
	3043994	FM 4470	02/15/12
	3047398	FM 4470	08/15/13
	3042909	FM 4470	08/03/11
	3038191	FM 4470	08/04/11
	3041939	FM 4470	08/14/12
	3035017	FM 4470	04/15/09
	3035560	FM 4470	01/11/10
Trinity ERD	F9240.03.09-R2	ASTM D4637	07/30/09
	F9240.11.08-R1	ASTM D4637	07/10/09
	F9240.07.08-R2	ASTM D4637	07/10/09
	F13260.08.09-1	ASTM D4637	08/07/09
	F45950.05.14	ASTM D4637	05/13/14
PRI Construction Materials	FBP-044-02-01.5	TAS 117-B/TAS 114-H/J	02/04/14
Technologies LLC	FBP-162-02-01.1	<b>Physical Properties</b>	05/15/14
-	FBP-136-02-01	Physical Properties	10/01/13



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### APPROVED ASSEMBLIES

**Membrane Type:** EPDM, Reinforced, Non-reinforced

**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete, Steel, Wood, Cementitious Wood Fiber, Gypsum

System Type A(1): One or more layers of insulation adhered with approved; membrane adhered

with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD		
Minimum: ½" thick	N/A	N/A

DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum: 1/4" thick N/A N/A

Note: All layers of insulation shall be adhered using I.S.O. Twin Pack Insulation Adhesive in continuous  $\frac{1}{2}$ " –  $\frac{3}{4}$ " wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Membrane:** Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and

the substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps

sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design -157.5 psf. on concrete and steel. (See General Limitation #9)

**Pressure:** -105 psf. on concrete and steel with Single-Ply LVOC Bonding Adhesive 1168

(See Limitation #9)

-45 psf. on gypsum, cwf or wood. (See General Limitation #9)



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EPDM, Reinforced, Non-reinforced **Membrane Type:** 

Recover, Insulated Deck Type 7I:

**Deck Description:** Concrete

**System Type A(2):** One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISO 95+ GL		
Minimum: 1.5 thick	N/A	N/A
Middle Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISO 95+ GL	` ,	•
Minimum: 1.5 thick	N/A	N/A
Tapered ISO 95+ GL		
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck, DensDeck Prime, SECUROCK Gypsun	1-Fiber Roof Board	•
Minimum: 1/4" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. All layers of insulation shall be adhered using I.S.O. Twin Pack Insulation Adhesive in continuous 1/2" - 3/4" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Firestone EPDM membrane fully adhered to the insulation with Firestone BA-Membrane:

> 2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal.

to both the underside of the roof cover and the substrate).

**Maximum Design** -157.5 psf. (See General Limitation #9)

**Pressure:** -105 psf. with Single-Ply Bonding Adhesive 1168 (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type A(3):** One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered ISO 95+ GL, Tapered RESISTA		
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
ISO 95+ GL, RESISTA		
Minimum 1/2" thick	N/A	N/A
Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener
	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD		
Minimum: 1/2" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Spray S Adhesive, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

#### Membrane:

Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

**Pressure:** -210 psf. (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

System Type A(4): One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered ISO 95+ GL, Tapered RESISTA	,	·
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
ISO 95+ GL, RESISTA		
Minimum ½" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISOGARD HD		•
Minimum: ½" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Stick applied in continuous  $\sqrt[3]{4}$ " – 1" wide ribbons spaced 6 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane:

Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design Pressure:

-225 psf. with Single-Ply LVOC Bonding Adhesive 1168.

(See General Limitation #9)

-247.5 psf. with all other Adhesives. (See General Limitation #9)

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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

System Type A(5): One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered ISO 95+ GL, Tapered RESISTA	` ,	•
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
ISO 95+ GL, RESISTA		
Minimum ½" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISOGARD HD	• •	•
Minimum: ½" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Stick applied in continuous  $\sqrt[3]{4}$ " – 1" wide ribbons spaced 6 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

#### Membrane:

Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design Pressure:

-225 psf. with Single-Ply LVOC Bonding Adhesive 1168.

(See General Limitation #9)

-247.5 psf. with all other Adhesives. (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type A(6):** One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered ISO 95+ GL, Tapered RESISTA		•
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
ISO 95+ GL, RESISTA		
Minimum ½" thick	N/A	N/A
<b>Top Insulation Layer</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISOGARD HD Composite		
Minimum: 2" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in  $\frac{1}{2}$  to  $\frac{3}{4}$  in. wide ribbons spaced 12 in. o.c. or Firestone I.S.O. Stick applied in continuous  $\frac{3}{4}$ " – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane:

Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design Pressure:

-202.5 psf. with I.S.O. Twin Pack Adhesive. (See General Limitation #9)

-60 psf. with I.S.O. Stick Adhesive. (See General Limitation #9)



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type A(7): One or more layers of insulation adhered with approved adhesive over existing

BUR asphalt; membrane adhered with approved adhesive.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered ISO 95+ GL, Tapered RESISTA	, ,	·
Minimum 1/2" thick with a 1/4" per ft. taper	N/A	N/A
ISO 95+ GL, RESISTA		
Minimum ½" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISOGARD HD Composite	, ,	·
Minimum: 2" thick	N/A	N/A

Note: Deck may be primed with asphaltic ASTM D41 primer prior to application of first layer of insulation. Top and middle layer of insulation shall be adhered with Firestone I.S.O. Stick applied in continuous 3/4" - 1" wide ribbons spaced 6 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane:

Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer and sealed with Firestone SA-1065 Adhesive or QuickSeam

Tape.

**Maximum Design** 

**Pressure:** -187.5 psf. (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type B(1):** Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
RESISTA		
Minimum 2" thick	2 or 3 with 7	1:4 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Middle Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
RESISTA	,	v
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered RESISTA		
Minimum: ½" thick with a ¼" per ft. taper	N/A	N/A

Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Spray S Adhesive, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: –45 psf. (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type B(2):** Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	Insulation Fasteners	Fastener
·	(Table 3)	Density/ft <sup>2</sup>
RESISTA		
Minimum 1.5" thick	2 or 3 with 7	1:2 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Middle Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
RESISTA	,	·
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Tapered RESISTA		
Minimum: ½" thick with a ¼" per ft. taper	N/A	N/A

Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in  $\frac{1}{2}$  to  $\frac{3}{4}$  in. wide ribbons spaced 12 in. o.c. or I.S.O. Spray S Adhesive, I.S.O. Fix II or I.S.O. Stick applied in continuous  $\frac{3}{4}$ " – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Min. 0.060" Firestone Standard RubberGard, RubberGard LS-FR, RubberGard

LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps sealed with Eigestone S A 1065 Adhesive or OvielsSeam Tape

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: –45 psf. (See General Limitation #9)



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type B(3): Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	Insulation Fasteners	Fastener
·	(Table 3)	Density/ft <sup>2</sup>
RESISTA		
Minimum 1.5" thick	2 or 3 with 7	$1:2.7 \text{ ft}^2$

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Middle Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
RESISTA	( ,	
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Tapered RESISTA		•
Minimum: ½" thick with a ¼" per ft. taper	N/A	N/A

Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Spray S Adhesive, I.S.O. Fix II or I.S.O. Stick applied in continuous 3/4" – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Min. 0.045" Firestone Standard RubberGard, RubberGard LS-FR, RubberGard

> LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -45 psf. (See General Limitation #9)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type B(4):** Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
DensDeck, DensDeck Prime		
Minimum 1/2" thick	2 or 3 with 7	1:4 ft <sup>2</sup>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK	<b>Glass-Mat Fiber Roof Board</b>	
Minimum 1/4" thick	2 or 3 with 7	1:4 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Middle Insulation Layer (Optional)	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
RESISTA		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener
	(Table 3)	Density/ft <sup>2</sup>
Tapered RESISTA		
Minimum: ½" thick with a ¼" per ft. taper	N/A	N/A

Note: Top and middle layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Spray S Adhesive, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Min. 0.045" Firestone Standard RubberGard, RubberGard LS-FR, RubberGard

LS-FR PT, RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -45 psf. (See General Limitation #9)

MIAMI-DADE COUNTY
APPROVED

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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

Base layer of insulation mechanically fastened, top layer adhered with approved System Type B(5):

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Base Insulation Laver Insulation Fasteners Fastener** Density/ft<sup>2</sup> (Table 3)

**RESISTA** 

1: 1 ft<sup>2</sup> Minimum 1.5" thick 2 or 3 with 7

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing **Application Standard RAS 117 for fastening details.** 

**Top Insulation Layer Insulation Fasteners Fastener** Density/ft<sup>2</sup> (Table 3)

RESISTA

Minimum 1.5" thick N/A N/A

Note: Top layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Fix II or I.S.O. Stick applied in continuous 3/4" - 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate). RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer

and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: −120 psf. (See General Limitation #7)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type B(6):** Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer Insulation Fasteners Fastener (Table 3) Density/ft<sup>2</sup>
ISO 95+ GL
Minimum 2-1/4" thick 2 or 3 with 7 1:4 ft<sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Top Insulation Layer Insulation Fasteners (Table 3) Density/ft $^2$  ISO 95+ GL Ninimum 1-1/2" thick N/A N/A

Note: Top layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in  $\frac{1}{2}$  to  $\frac{3}{4}$  in. wide ribbons spaced 12 in. o.c. or I.S.O. Fix II or I.S.O. Stick applied in continuous  $\frac{3}{4}$ " – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate). RubberGard EcoWhite Side and end laps sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: –45 psf. (See General Limitation #9)



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type B(7): Base layer of insulation mechanically fastened, top layer adhered with approved

adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Base Insulation Layer Insulation Fasteners** Fastener Density/ft<sup>2</sup> (Table 3) ISO 95+ GL

1:1ft<sup>2</sup> Minimum 2" thick 2 or 3 with 7

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing **Application Standard RAS 117 for fastening details.** 

**Top Insulation Layer Insulation Fasteners Fastener** Density/ft<sup>2</sup> (Table 3) ISOGARD HD Minimum 1/2" thick N/A N/A

Note: Top layer of insulation shall be adhered with Firestone I.S.O. Twin Pack Insulation Adhesive applied in ½ to ¾ in. wide ribbons spaced 12 in. o.c. or I.S.O. Fix II or I.S.O. Stick applied in continuous  $\frac{3}{4}$ " – 1" wide ribbons spaced 12 o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

−90 psf. (See General Limitation #7) Pressure:



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete, Gypsum

System Type C(1): All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Insulation Fasteners Insulation Layer** Fastener (Table 3) Density/ft<sup>2</sup> ISO 95+ GL 1:2 ft<sup>2</sup> Minimum 1.3" thick See Table 3

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Fire Barrier: None.

Fully adhere any Firestone RubberGard®® EPDM membrane to the insulation Membrane:

with Firestone Bonding Adhesive BA-2004 T or Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168at a rate of 45-60 sq.

ft./gal. (coverage area is for adhesive application to both mating surfaces).

Surfacing: (Optional) Firestone Acryli-Top (PC-100) to be applied at 1 gal./100 sq. ft. with

an airless sprayer. If roller applied, two separate coats of 200 sq. ft. per gallon are

required.

Maximum Design

-45 psf. (See General Limitation #9) Pressure:



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Deck Type 7I: Recover, Insulated

**Deck Description:** 18-22 ga. Grade 80 steel deck is secured to structural supports spaced 6 ft. o.c.

with Traxx 5 fasteners spaced 6" o.c. (two fasteners installed at each bearing

attachment point) and Traxx 1 fasteners 24" o.c. at the side laps

System Type C(2): All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Insulation Layer Insulation Fasteners** Fastener Density/ft<sup>2</sup> (Table 3)

**Plywood** 

Minimum 19/32" thick 1 or 2 with 7 See Below

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard MAX,

> RubberGard MAX FR, RubberGard EcoWhite or RubberGard Platinum EPDM membrane fully adhered with Firestone Bonding Adhesive BA-2004 T or Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 at a rate of 45-60 sq. ft./gal. per side. Roof cover side laps are sealed with Firestone SA-1065 Splice Adhesive applied at a rate of 120 lineal feet per gallon or Pliobond 9053 Splice Adhesive applied at a rate of 120 lineal feet per gallon or laps may be sealed with QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC

Primer and QuickSeam Tape

Maximum Design

Pressure: -45 psf. with a fastener density of 1:2.6 ft<sup>2</sup> (See General Limitation #7)

-52.5 psf. with fastener density of 1:1.6 ft<sup>2</sup> (See General Limitation #7)



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EPDM, Reinforced, Non-reinforced **Membrane Type:** 

Deck Type 7I: Recover, Insulated

**Deck Description:** 18-22 ga. Steel or Concrete

**System Type C(3):** Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
RESISTA Minimum 1" thick	1 or 2 with 7 (steel)	1:2 ft <sup>2</sup>
William I thick	2 or 3 with 7 (steel)	1.2 1

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the substrate) or or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft<sup>2</sup>/gal. (240 ft<sup>2</sup>/gal. to both the underside of the roof cover and the substrate). RubberGard EcoWhite Side and end laps sealed with EcoWhite OuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -45 psf. (See General Limitation #9)



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type C(4): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Insulation Fasteners Insulation Layer** Fastener Density/ft<sup>2</sup> (Table 3) RESISTA 1:1 ft<sup>2</sup> Minimum 2" thick 2 or 3 with 7

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -150 psf. (See General Limitation #7)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete

**System Type C(5):** Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer Insulation Fasteners (Table 3) Density/ft $^2$  RESISTA Insulation Fasteners (Table 3) Density/ft $^2$  Till 1.33 ft $^2$ 

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate). RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer

and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -105 psf. (See General Limitation #7)



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Deck Type 7I: Recover, Insulated

**Deck Description:** 18-22 ga. Grade 33 steel deck is secured to structual supports spaced 6 ft. o.c.

> with Traxx 5 fasteners spaced 6" o.c. (two fasteners installed at each bearing attachment point) and Traxx 1 fasteners 12" o.c. at the side laps or Concrete

System Type C(6): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

<b>Bottom Insulation Layer</b>	Insulation Fasteners	Fastener
(not used in steel deck)	(Table 3)	Density/ft <sup>2</sup>
ISO 95+ GL		
Minimum 1.5" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners	Fastener
(total insulation not to exceed 1" max. for steel deck)	(Table 3)	Density/ft <sup>2</sup>
Plywood		
Minimum 19/32" thick	1 or 2 with 7 (steel)	1:1 ft <sup>2</sup>
	2 or 3 with 7 (concrete)	

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal to

both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer

and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -142.5 psf. (See General Limitation #7)



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Deck Type 7I: Recover, Insulated

**Deck Description:** 18-22 ga. Steel

System Type C(7): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	<b>Insulation Fasteners</b>	Fastener
	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD		
Minimum 1/2" thick	1 or 2 with 7	$1:2.7 \text{ ft}^2$
(total insulation not to exceed 1" max )		

Note: Insulation shall be simultaneously fastened per the above fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

-45 psf. (See General Limitation #9) Pressure:



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Deck Type 7I: Recover, Insulated

**Deck Description:** 18-22 ga. Grade 33 steel deck is secured to structural supports spaced 6 ft. o.c.

> with Traxx 5 fasteners spaced 6" o.c. (one fastener installed at each bearing attachment point) and Traxx 1 fasteners 24" o.c. at the side laps or Concrete

System Type C(8): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	Insulation Fasteners	Fastener
(Not used for steel deck)	(Table 3)	Density/ft <sup>2</sup>
ISO 95+ GL		
Minimum 1.5" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener
(Total insulation for steel deck not to exceed 1" max.)	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD		
Minimum 1/2" thick	1 or 2 with 7 (steel)	1:1.33 ft <sup>2</sup>
	2 or 3 with 7 (concrete)	

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the substrate) or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft²/gal. (240 ft²/gal. to both the underside of the roof cover and the substrate). RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -60 psf. (See General Limitation #7)



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EPDM, Reinforced, Non-reinforced **Membrane Type:** 

Deck Type 7I: Recover, Insulated

18-22 ga. Grade 33 steel deck is secured to structural supports spaced 6 ft. o.c. **Deck Description:** 

> with Traxx 5 fasteners spaced 6" o.c. (one fastener installed at each bearing attachment point) and Traxx 1 fasteners 24" o.c. at the side laps or Concrete

System Type C(9): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	<b>Insulation Fasteners</b>	Fastener
(Total insulation for steel deck not to exceed 1" max.)	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD Composite		
Minimum 1" thick	1 or 2 with 7 (steel)	1:1.33 ft <sup>2</sup>
	2 or 3 with 7 (concrete)	

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft²/gal. to both the underside of the roof cover and the substrate) or Water Based Bonding Adhesive-P roller applied at a rate of 120 ft<sup>2</sup>/gal. (240 ft<sup>2</sup>/gal. to

both the underside of the roof cover and the substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -60 psf. (See General Limitation #7)



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EPDM, Reinforced, Non-reinforced **Membrane Type:** 

Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type C(10): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Insulation Layer Insulation Fasteners** Fastener Density/ft<sup>2</sup> (Table 3) **ISOGARD HD Composite** Minimum 1.5" thick 1:1.33 ft<sup>2</sup> 2 or 3 with 7

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -112.5 psf. (See General Limitation #7)



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Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type C(11): Insulation attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners	Fastener
•	(Table 3)	Density/ft <sup>2</sup>
ISOGARD HD Composite		
Minimum 2" thick	2 or 3 with 7	1:1.33 ft <sup>2</sup>

Note: All layers of insulation shall be simultaneously mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard

Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone Firestone BA-2004 T Bonding Adhesive roller applied at

a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps primed with QuickPrime Plus Primer or QuickPrime Plus LVOC Primer and sealed with EcoWhite QuickSeam Tape or EcoWhite EPDM Adhesive. All other RubberGard side and end laps are primed with Firestone QuickPrime, QuickPrime Plus or QuickPrime Plus LVOC Primer

and sealed with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: −120 psf. (See General Limitation #7)



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EPDM, Reinforced, Non-reinforced **Membrane Type:** 

Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type C(12): All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners	Fastener
·	(Table 3)	Density/ft <sup>2</sup>
Plywood		
Minimum 19/32" thick	2 or 3 with 7	1:2 ft <sup>2</sup>

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

> RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft<sup>2</sup>/gal. (120 ft<sup>2</sup>/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -75 psf. (See General Limitation #7)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** 18-22 ga. Grade 33 steel deck is secured to structural supports spaced 6 ft. o.c.

with Traxx 5 fasteners spaced 6" o.c. (two fasteners installed at each bearing

attachment point) and Traxx 1 fasteners 12" o.c. at the side laps

**System Type C(13):** All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
Plywood		
Minimum 19/32" thick	1 or 2 with 7	1:1 ft <sup>2</sup>

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Firestone Standard RubberGard, RubberGard LS-FR, RubberGard LS-FR PT,

RubberGard MAX, RubberGard MAX PT, RubberGard MAX FR, RubberGard Ecowhite or RubberGard Platinum EPDM membrane fully adhered to the insulation with Firestone BA-2004 T Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, Single-Ply LVOC Bonding Adhesive 1168 roller applied at a rate of 60 ft²/gal. (120 ft²/gal. to both the underside of the roof cover and the

substrate).

RubberGard EcoWhite Side and end laps sealed with EcoWhite Splice Adhesive or EcoWhite QuickSeam Tape. All other RubberGard side and end laps are sealed

with Firestone SA-1065 Adhesive or QuickSeam Tape.

Maximum Design

Pressure: -142.5 psf. (See General Limitation #7)



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**Deck Type 7I:** Recover, Insulated

**Deck Description:** Concrete, Cementitious Wood Fiber, Gypsum, Wood, Steel

**System Type D(1):** Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer Insulation Fasteners Fastener (Table 3) Fastener

ISO 95+ GL, RESISTA Minimum 1.4" thick

N/A N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane.

Fire Barrier: None.

Membrane: Mechanically attach any 7 1/2' Reinforced Firestone RubberGard® EPDM

membrane with Firestone All-Purpose or Heavy-Duty fasteners in 2" Metal Plates (or metal battens) 6" o.c. within the 7" wide side laps, or any nominal 10' Reinforced Firestone RubberGard® EPDM membrane with Firestone All-Purpose or Heavy Duty Fasteners in metal betten strip only 6" o a with 7" side lange.

or Heavy-Duty Fasteners in metal batten strip only 6" o.c. with 7" side laps.

Or

Mechanically attach Firestone QuickSeam R.M.A. Strip along its 4" wide center section with Firestone Polymer or Metal Batten Strip and All-Purpose or Heavy-Duty Fasteners along the batten strip or with Firestone 2" Metal Plates or V-Plates with All-Purpose or Heavy-Duty Fasteners; fasteners shall be 6" o.c. within the QuickSeam R.M.A Strip spaced 7-1/2 ft. o.c. Any Reinforced Firestone

RubberGard® EPDM membrane is adhered to each QuickSeam R.M.A. Strip.

Surfacing: (Optional) Firestone Acryli-Top (PC-100) to be applied at 1 gal./100 sq. ft. with

an airless sprayer. If roller applied, two separate coats of 200 sq. ft. per gallon are

required.

Maximum Design

Pressure: -45 psf. (See General Limitation #9.)

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NOA No.: 13-0715.04 Expiration Date: 08/10/18 Approval Date: 06/12/14 Page 33 of 35 **Membrane Type:** EPDM, Reinforced

Deck Type 7I: Recover, Insulated

**Deck Description:** Concrete

System Type D(2): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
ISO 95+ GL, RESISTA, ISOGARD HD		
Minimum 1.5" thick	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane.

Mechanically attach Firestone RubberGard MAX FR® or RubberGard MAX FR® Membrane:

> EPDM membrane with Firestone Heavy-Duty fasteners in V-Plates or 2" Metal Plates 6" o.c. within the 7" wide side laps in rows 7 feet o.c. The roof cover laps are adhered by priming both lap surfaces with QuickPrime primer, Single-Ply QuickPrime Primer or Single-Ply LVOC Primer then applying 7" wide QuickSeam Tape.

Or

Mechanically attach Firestone QuickSeam R.M.A. Strip along its 4" wide center section with Firestone Polymer or Metal Batten Strip and All-Purpose or Heavy-Duty Fasteners along the batten strip or with Firestone 2" Metal Plates or V-Plates with All-Purpose or Heavy-Duty Fasteners; fasteners shall be 6" o.c. within the QuickSeam R.M.A Strip spaced 7 ft. o.c. RubberGard MAX or RubberGard MAX FR EPDM membrane is adhered to each QuickSeam R.M.A. Strip.

Maximum Design

Pressure: -52.5 psf. (See General Limitation #7)



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### **RECOVER SYSTEM LIMITATIONS:**

1 All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

### **GENERAL LIMITATIONS:**

- Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
- 3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
- An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.
- 5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
- 6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
- Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
- All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
- The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
- 10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

### END OF THIS ACCEPTANCE

MIAMI-DADE COUNTY APPROVED

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